Electronic Version
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Claims

[c1] 1. A composition comprising:
(a) a bulk resin component comprising a polycarbonate resin;
(b) a polycarbonate-siloxane copolymer in an amount sufficient to provide an amount of siloxane of at least 3% by weight of the total composition; and
(c) a colorant composition comprising titanium dioxide having an organic coating, wherein the amount of titanium dioxide is from 1 to 2.5 % by weight of the total composition.

[c2] 2. The composition of claim 1, wherein the bulk resin component makes up at least 50% of the composition.

[c3] 3. The composition of claim 2, wherein the amount of titanium dioxide is from 1 to 1.5% by weight of the total composition.

[c4] 4. The composition of claim 3, further comprising a rubbery impact modifier.

[c5] 5. The composition of claim 4, wherein the rubbery impact modifier is selected from the group consisting of acrylic rubbers, ASA rubbers, diene rubbers,

organosiloxane rubbers, EPDM rubbers, styrene-butadiene-styrene (SBS) or styrene-ethylene-butadiene-styrene (SEBS) rubbers, ABS rubbers, MBS rubbers and glycidyl ester impact modifiers, and mixtures thereof.

[c6] 6. The composition of claim 5, wherein the rubbery impact modifier is present in an amount of from 1 to 30% by weight.

[c7] 7. The composition of claim 6, further comprising an antidrip agent.

[c8] 8. The composition of claim 7, wherein the antidrip agent is styrene-acrylonitrile copolymer encapsulated polytetrafluoroethylene.

[c9] 9. The composition of claim 8, further comprising an effective flame-retarding amount of flame retardant.

[c10] 10. The composition of claim 9, wherein the flame retardant is a phosphate flame retardant.

[c11] 11. The composition of claim 10, wherein the phosphate flame retardant is bis-phenol A tetraphenyl diphosphate.

[c12] 12. The composition of claim 9, wherein the flame retardant is a sulfonate.

[c13] 13. The composition of claim 12, wherein the sulfonate is a perfluoroalkane sulfonate.

[c14] 14. The composition of claim 13, wherein the perfluoroalkane sulfonate is potassium perfluorobutane sulfonate.

[c15] 15. The composition of claim 3, wherein the organic coating comprises an organosiloxane.

[c16] 16. The composition of claim 15, wherein the amount of titanium dioxide is from 1 to 1.5% by weight of the total composition.

[c17] 17. The composition of claim 16, further comprising an effective flame-retarding amount of flame retardant.

[c18] 18. The composition of claim 17, wherein the flame retardant is a phosphate flame retardant.

[c19] 19. The composition of claim 18, wherein the phosphate flame retardant is bis-phenol A tetraphenyl diphosphate.

[c20] 20. The composition of claim 17, wherein the flame retardant is a sulfonate.

[c21] 21. The composition of claim 20, wherein the sulfonate if a perfluoroalkane sulfonate.

[c22] 22. The composition of claim 21, wherein the perfluo-

roalkane sulfonate is potassium perfluorobutane sulfonate.

[c23] 23. The composition of claim 15, wherein the organic coating comprises a trimethylolpropanol.

[c24] 24. The composition of claim 23, wherein the bulk component further comprises a rubbery impact modifier.

[c25] 25. The composition of claim 24, wherein the rubbery impact modifier is selected from the group consisting of acrylic rubbers, ASA rubbers, diene rubbers, organosiloxane rubbers, EPDM rubbers, styrene-butadiene-styrene (SBS) or styrene-ethylene-butadiene-styrene (SEBS) rubbers, ABS rubbers, MBS rubbers and glycidyl ester impact modifiers, and mixtures thereof.

[c26] 26. The composition of claim 23, further comprising an effective flame-retarding amount of flame retardant.

[c27] 27. The composition of claim 2, wherein the organic coating comprises trimethylolpropanol.

[c28] 28. The composition of claim 27, wherein the amount of titanium dioxide is from 1 to 1.5% by weight of the total composition.

[c29] 29. The composition of claim 2, wherein the bulk com-

ponent further comprises an engineering thermoplastic.

[c30] 30. The composition of claim 29, wherein the engineering thermoplastic is a styrene acrylonitrile copolymer or polymethyl(methacrylate).

[c31] 31. An article, having a wall thickness greater than a first thickness, said article being formed from a molding composition comprising:
(a) a bulk resin component comprising a polycarbonate resin;
(b) a polycarbonate-siloxane copolymer; and
(c) a colorant composition comprising titanium dioxide, wherein the titanium dioxide has an organic coating, and the amount of polycarbonate-siloxane copolymer is selected such that molding composition achieves a V0 UL fire rating at the first thickness.

[c32] 32. The article of claim 31, wherein the bulk resin component makes up at least 50% of the molding composition.

[c33] 33. The article of claim 32, wherein the first thickness is 1.6 mm, and the polycarbonate-siloxane copolymer is present in an amount sufficient to provide an amount of siloxane of at least 3% by weight of the total composition.

[c34] 34. The article of claim 32, wherein the organic coating comprises an organosiloxane.

[c35] 35. The article of claim 34, wherein the amount of titanium dioxide is from 1 to 1.5% by weight of the total composition.

[c36] 36. The article of claim 35, further comprising an effective flame-retarding amount of flame retardant.

[c37] 37. The article of claim 36, wherein the flame retardant is a phosphate flame retardant.

[c38] 38. The article of claim 37, wherein the phosphate flame retardant is bis-phenol A tetraphenyl diphosphate.

[c39] 39. The article of claim 36, wherein the flame retardant is a sulfonate.

[c40] 40. The article of claim 39, wherein the sulfonate if a perfluoroalkane sulfonate.

[c41] 41. The article of claim 40, wherein the perfluoroalkane sulfonate is potassium perfluorobutane sulfonate.

[c42] 42. The article of claim 34, wherein the organic coating comprises trimethylolpropanol.

[c43] 43. The article of claim 42, wherein the bulk component

further comprises a rubbery impact modifier.

[c44] 44. The article of claim 43, wherein the rubbery impact modifier is selected from the group consisting of acrylic rubbers, ASA rubbers, diene rubbers, organosiloxane rubbers, EPDM rubbers, styrene-butadiene-styrene (SBS) or styrene-ethylene-butadiene-styrene (SEBS) rubbers, ABS rubbers, MBS rubbers and glycidyl ester impact modifiers, and mixtures thereof.

[c45] 45. The article of claim 42, further comprising an effective flame-retarding amount of flame retardant.

[c46] 46. The article of claim 32, wherein the organic coating comprises trimethylolpropanol.

[c47] 47. The article of claim 46, wherein the first thickness is 1.6 mm, and the polycarbonate-siloxane copolymer is present in an amount sufficient to provide an amount of siloxane of at least 3% by weight of the total composition.

[c48] 48. A method for forming a light colored, flame retardant polycarbonate article comprising the steps of forming a blend comprising:
(a) a bulk resin component comprising a polycarbonate resin;
(b) a polycarbonate-siloxane copolymer in an amount

sufficient to provide an amount of siloxane of at least 3% by weight of the total composition; and
(c)a colorant composition comprising titanium dioxide having an organic coating comprising an organic polysiloxane, trimethylolpropanol, or mixtures thereof, wherein the amount of titanium dioxide is from 1 to 2.0 % by weight of the total composition; and
forming an article from the blend.

[c49] 49. The method of claim 48, wherein the bulk resin component makes up at least 50% of the blend.

[c50] 50. The method of claim 49, wherein the amount of titanium dioxide is from 1 to 1.5% by weight of the total composition.

[c51] 51. The method of claim 49, wherein the bulk component further comprises a rubbery impact modifier selected from the group consisting of acrylic rubbers, ASA rubbers, diene rubbers, organosiloxane rubbers, EPDM rubbers, styrene-butadiene-styrene (SBS) or styrene-ethylene-butadiene-styrene (SEBS) rubbers, ABS rubbers, MBS rubbers and glycidyl ester impact modifiers, and mixtures thereof.

[c52] 52. The method of claim 51, wherein the rubbery impact modifier is present in an amount of from 1 to 30% by

weight.

[c53] 53. The method of claim 49, further comprising an effective flame-retarding amount of flame retardant.

[c54] 54. The method of claim 53, wherein the flame retardant is a phosphate flame retardant.

[c55] 55. The method of claim 54, wherein the phosphate flame retardant is bis-phenol A tetraphenyl diphosphate.

[c56] 56. The method of claim 49, wherein the flame retardant is a sulfonate.

[c57] 57. The method of claim 56, wherein the sulfonate if a perfluoroalkane sulfonate.

[c58] 58. The method of claim 57, wherein the perfluoroalkane sulfonate is potassium perfluorobutane sulfonate.

[c59] 59. The method of claim 49, wherein the bulk component further comprises an engineering thermoplastic.

[c60] 60. The method of claim 59, wherein the engineering thermoplastic is a styrene acrylonitrile copolymer or polymethyl(methacrylate).

[c61] 61. A method for enhancing the flame retardance of a light colored composition comprising a bulk resin component comprising polycarbonate; a polycarbonate-silox-

ane copolymer; and a colorant composition comprising titanium dioxide, said method comprising the steps of

(b) a polycarbonate-siloxane copolymer; and

(b) selecting as the titanium dioxide a titanium dioxide having an organic coating comprising a polyorganosiloxane, trimethylolpropanol, or mixtures thereof, wherein the amount of polycarbonate-siloxane copolymer is sufficient to provide an amount of siloxane of at least 3% by weight of the total composition.